

**Syllabus – BIO 495L**  
**TROPICAL ECOLOGY LABORATORY**  
Spring 2002

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Office Hours: Tues., Thurs. 9:00 – 11:00 a.m,

In addition, the class will be offered jointly with Topiltzin Contreras-MacBeath and other faculty from La Universidad Autónoma del Estado de Morelos.

**Texts:** Bates, Marston. 1950. The Nature of Natural History, Princeton University Press  
Mammals. Peterson Field Guide  
Mexican Birds. Peterson Field Guide  
Guide to the Coastal Marine Fishes of California. 1972. California Fish Bull. No. 157  
Handouts.

### **I. course description**

The purpose of this course is 1) to provide an introduction to the basic field methods that are involved in the study of tropical vertebrates and their populations and 2) to serve as a vehicle for intercultural exchange among Mexican scientists and students and U.S. scientists and students.

The field portion of class will be conducted in Mexico in conjunction with faculty from the University of Morelos. The class will be conducted in both Spanish and English, with lectures given in both languages.

### **II. course organization**

The general format of the class will consist of a few of orientation classes that will meet a couple of week prior to the week-long trip to Mexico. During the orientation sessions, we will cover such topics as the biogeography, ecology, and vertebrate zoology of the region of Mexico near Acapulco, Mexico. We will also cover various aspects of the Mexican culture and way of life. The class will culminate in a week-long trip to Mexico, in which we will fly to Acapulco, and then be shuttled to the field site approximately 30 km north

of Acapulco, Mexico. During the time that we are with the students and faculty from the University of Morelos, the students will be divided into four groups. Each group will spend approximately one day each studying ichthyology and limnology, herpetology, ornithology, and mammalogy. Instructors will present area specific field techniques for study of the different animal groups, including introducing students to the local species. Animal sections will be taught by US and Mexican faculty with instruction in both English and Spanish.

Being bilingual is not necessary. U.S. students will be taught primarily by U.S. faculty (Northern Kentucky University) while Mexican students will be taught primarily by Mexican faculty (University of Morelos). However, the format of the class in which all students work together will encourage interaction among Mexican and U.S. students and faculty. Many of the participants in the class will have some facility with both languages, which will aid in making cross-cultural exchanges a major part of the course.

### **III. grading:**

Each student will keep a journal of field notes in which observations are recorded about the biology and culture of Mexico. This field notebook is worth 200 points. Grades will be determined by the completeness of recorded observations and the neatness/organization of field notes.

There will be 100 points for participation in the field activities and discussion in class. In addition, there will be one exam worth 50 points. This will give a total of 350 points for the course. Your final grade in the course will be assigned based upon the percentage of the points that you earn.

100% - 90% -- A  
89.9% - 80% -- B  
79.9% - 70% -- C  
69.9% - 60% -- D  
below 60% -- F

### **IV. tentative schedule in Mexico:**

Saturday Morning: Leave Cincinnati airport on flight to Mexico City with stop-over in Chicago. Connect with flight from Mexico City to Acapulco.

Saturday Evening: Shuttled from Acapulco to study site about 30 km north of Acapulco, set up camp.

Sunday to Thursday: Class activities with the Mexican teachers and students will be here for the next 6 days and we will leave at 4:00 am on Saturday morning.

Friday: Day to relax, get used to the tropics, and enjoy the beach, take a bus to Acapulco.

Saturday morning: Catch return flight to Mexico City, and then transfer to flight back to Cincinnati airport. Arrive late in the evening

## **V. international travel:**

Each student must have either an official birth certificate (raised seal stamped into the paper, not a copy of an official birth certificate) and a picture ID (such as a driver's license) OR a valid passport. Without these documents, entry into Mexico will not be permitted. No substitutions are acceptable.

There are also a couple of contraband items that I should mention. When crossing the international border, students may be subjected to a very thorough search by either US or Mexican customs at the airports. In addition, we will drive through several military check points while in Mexico where we may be (though not likely) subject to being searched. Thus, the chance of being caught with something illegal is high. Drugs that are illegal in the USA are also illegal in Mexico. While guns (especially handguns) are common in the US they are absolutely illegal to bring into Mexico. The possession of either one of these things could net you a decade or more in a Mexican jail. If you have any prescription drugs that you need to bring, make sure that the drugs are in the original bottle and that the prescription information is clearly shown on the bottle.

Students should not be straying away from camp or going out alone (especially in Acapulco). Always go as a group or at least couples. If a situation looks dangerous, stay clear of it. These are just some common knowledge tips for traveling abroad. Always be on guard against whatever situation may arise. This doesn't mean you shouldn't have fun, just be safe at it.

## **VI. equipment needed:**

We are going to be camping out for the duration of our trip. Thus you will need basic camping equipment, however luggage capacity will be limited so you need to conserve space as much as possible. We will not be cooking at any camp site so you do not need lanterns, camp stoves or cooking utensils. Keep in mind that we will be spending most of our time away from any large stores, so for anything that you forget there is an excellent chance that you will have to do without it.

- Sleeping bag or blanket, sheet, pillow, mattress: In general the weather will be warm so a heavy sleeping bag will be too warm; a lighter bag will be all the cover that you need on most nights, though some nights can be a little chilly.
- Tent: Individual tents are not needed, you should arrange to share a tent with one or more persons. Be sure that your tent has a rainfly and is insect proof. For the most part, we will be camping on the beach, so the substrate will be sand. We should have several tents available to us from the Department of Biological Sciences.
- Flashlight and extra batteries: A headlight would work best. An extra waterproof light would also be good.
- Binoculars
- Extra Glasses if you wear them (I had a student lose her's in the surf the 1<sup>st</sup> day and had to wear sunglasses the rest of the week ... no fun at night)

- Sun Glasses
- Pocketknife (pack this in your luggage as they are no longer permitted on airlines)
- Camera, film, and batteries for the camera
- Notebook and pencils
- Snorkel and mask: This will be used at several springs and rivers in the area, however, the current is non-existent and thus you will not need fins or other diving equipment.
- Insect repellent, sunscreen, soap, shampoo, etc.: Insect repellent and sunscreen are very important.
- Clothes: You will need a couple of changes of clothes, but, please, do not bring a change of clothes for every day that we will be gone. A couple of pairs of long pants, a couple of pairs of shorts, some t-shirts (one long-sleeved), a jacket/sweatshirt, swim suit, socks and underwear should about cover it. You should also have a hat and a rain jacket or poncho. A pair of hiking boots will be helpful, tennis shoes for around camp, and a pair of shoes that you can get wet (dive boots work excellent for these). A towel will be useful. There are shower facilities (unheated, but we are officially in the tropics) at the camp site near San Blas. There are no facilities for plugging in such things as hair dryers, etc.

**Money:** Most of the expenses of the trip will be covered in the fee for the course. However, you will need money for any meals you eat in San Blas. You will also need money for the myriad of beverages and snacks that people always seem to need while on a trip. Your meals at camp include a beverage, but any additional beverages will cost you. Finally, there will be several opportunities to buy souvenirs during the trip. In this regard, you could spend anywhere from a few dollars to hundreds of dollars. A minimum might be an additional \$100.00. Credit cards are accepted in some places but not in many of the places that we will be travelling through. We will exchange money at the airport (hopefully in Mexico City) both coming and going.

- Calling home: For the most part, we will not be near a phone while we are camping out. You can buy phone cards in San Blas that work in phone booths. From these booths you can place a direct dial call back to the US and the rates are pretty reasonable (\$1.00 per minute). Collect calls or calls charged to credit cards will be very expensive, if you can get the call through at all. You should tell people in the US that you will not be in regular contact with them by phone. In Matanchén, there are no phones, so people in the US have no way to call you.